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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,317	04/21/2004	Wen-Kuen Chen	E0523-00059	5674
8933	7590	08/10/2006	EXAMINER	
DUANE MORRIS, LLP IP DEPARTMENT 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103-4196			DINH, TRINH VO	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/829,317

Applicant(s)

CHEN ET AL.

Examiner

Trinh Vo Dinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed 07/25/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>06/26/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a response to an RCE filed 07/25/2006.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5 and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Chao et al (US 7,030,552 of record).

Respecting claims 1 and 5, Chao discloses organic light-emitting diode structures (Figs. 1-2) forming an array, each of the organic diode structures comprising first and second anodes (110, 210, 211), first and second organic light emitting layers (120, 220, 221) disposed between the first and second anodes, and a first electrode (130, 230) disposed between the first and second organic light-emitting layers (103), and an insulating layer (140, 240) disposed between the first and second electrodes wherein the first light-emitting layer is for substantially emitting light in a first direction and the second organic light-emitting layer is for substantially emitting light in a second direction opposite to the first direction (cols 3-4).

Respecting claim 2 and 11, Chao discloses light being emitted from at least one of the first and second organic light-layers (120, 220, 221) when an electric current is passed between one of the first and the second anodes and the first electrode.

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Respecting claims 3-4 and 12-13, Chao discloses a second electrode (130, 231) disposed between the first and the second organic layers (120, 220, 221), and an insulating layer (140, 240) disposed between the first and second electrodes (130, 230, 231).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chao in view of Wang (US 6,043,478 of record).

Respecting claim 6, Chao discloses every feature of the claimed invention except transistors. Wang discloses a first transistor (M1) coupled to each of the organic light-emitting diode structures (Fig. 4), and a second transistor (M2) coupled to each of the organic light-emitting diode structures. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Chao's display with transistors as taught by Wang in order to drive pixels of organic structures.

Respecting claim 7-10, Wang discloses, in Fig. 4, the first transistor (S 1) being coupled to one of the first and the second anodes of the organic light-emitting diode structures while the second transistor (M2) being coupled to the other one of the first and the second anodes of the organic light-emitting diode structures. Wang further discloses a third transistor (M4, M3) coupled to the first and the second transistors (S 1, S2), the first and the second transistors drive the organic light-emitting diode structures, and the

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third switch (M3, M4) switching the first and second transistors (M1, M2).

5. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kontogeorgakis et al (US 6,822,611 of record) in view of Chao.

Respecting claim 14, Kontogeorgakis discloses, in Fig. 4, a telecommunication device comprising a main body (12), a flip-up door (14), and a display (16) beneath the flip-up door. However, Kontogeorgakis does not suggest the display comprising diode structures which each structure including anodes, organic light-emitting layers and an electrode. Chao discloses the display comprising the organic light-emitting diode structures as discussed above in claim 1. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ Komatsu's structure to communication device of Kontogeorgakis. Doing so would reduce display size to reduce an emission area (Komatsu: col. 3, lines 3-5).

Respecting claim 15, Chao discloses a second electrode (130, 231) disposed between the first and the second organic layers (120, 220, 221), and an insulating layer (140, 240) disposed between the first and second electrodes (130, 230, 231).

Respecting claim 16, Chao discloses the structure comprising an insulating layer (140, 240) disposed between the first and second electrodes (130, 230, 231).

6. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kontogeorgakis as modified by Chao, and further in view of Wang (US 6,043,478 of record).

Respecting claim 17, Kontogeorgakis as modified by Chao discloses every feature of the claimed invention except transistors. Wang discloses a first transistor (M1)

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coupled to each of the organic light-emitting diode structures (Fig. 4), and a second transistor (M2) coupled to each of the organic light-emitting diode structures. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Chao's display with transistors as taught by Wang in order to drive pixels of organic structures.

Respecting claim 18, Wang further discloses a third transistor (M4, M3) coupled to the first and the second transistors (S 1, S2).

Inquiry

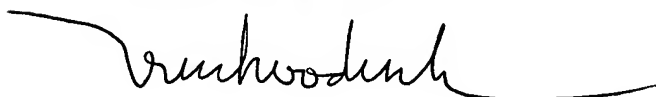
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trinh Vo Dinh whose telephone number is (571) 272-1821. The examiner can normally be reached on Monday to Friday from 9:30AM to 6:00PM. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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August 03, 2006

TRINH DINH
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Trinh Dinh', with a long horizontal flourish extending to the right.